



PATENT SPECIFICATION

Convention Date (Germany): Aug. 2, 1926.

275,245

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Application Date (in United Kingdom): July 27, 1927. No. 19,986/27.

Complete Accepted: Oct. 29, 1928.

COMPLETE SPECIFICATION.

Manufacture of Stable Diazo-salt Preparations.

We, I. G. FARBENINDUSTRIE AKTIEN-GESELLSCHAFT, a joint stock company organised according to the laws of Germany, of Frankfurt a/Main, Germany, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

Specification No. 273,352 describes the manufacture of stable diazo-preparations by mixing diazo-compounds with metal salts of arylsulphonic acids, whereby, even when sparingly soluble diazo-salts are used, more readily soluble preparations are obtained.

Now the acid 1:5-naphthalenedisulphonates of certain diazonium bases have more or less the tendency of becoming transformed into their neutral, more sparingly soluble salts. As has also been disclosed in Specification No. 269,212 they are, when dissolved in water, partly split up into the neutral salt and into free naphthalene-disulphonic acid. This is the case to a particularly great extent with the 1:5-naphthalenedisulphonates of the diazotised nitro-anilines. Even if the solubility of the preparations obtained from the compounds in question is improved by the addition of the above-named metal salts of readily soluble arylsulphonic acids, it is not sufficient for all technical purposes.

According to the present invention stable diazo-salt preparations of good solubility are made by mixing a solid naphthalene sulphonate of a diazo-compound with a free solid arylsulphonic acid. In this manner the splitting up of the acid diazo-salts is restrained and preparations are obtained which are still more readily soluble than are the preparations obtainable by the addition of metal salts of the arylsulphonic acids, and are at the same time very stable.

The following examples illustrate the invention, the parts being by weight:—

EXAMPLE 1.

A mixture of 10 parts of acid and 1 part

of neutral 1:5-naphthalenedisulphonate of diazotised ortho-nitraniline, which is extremely sparingly soluble in water, is intimately mixed with 5 parts of 1:5-naphthalenedisulphonic acid and 0.5 part of sodium benzyl-naphthalenesulphonate. The mixture thus obtained is readily soluble in water to a clear solution.

EXAMPLE 2.

A mixture of 10 parts of acid and 1 part of neutral-1:5-naphthalenedisulphonate of diazotised para-nitraniline, which does not dissolve to a solution of 2 per cent. strength, is intimately mixed with 3 parts of 1:5-naphthalenedisulphonic acid. The mixture so prepared is easily soluble in water to a clear solution.

Instead of the 1:5-naphthalenedisulphonic acid there may be used with a similar result any other non-hygroscopic solid free arylsulphonic acid, for instance paratoluenesulphonic acid.

In practice, there can, of course, conveniently be used only such solid free arylsulphonic acids as are not hygroscopic or deliquescent.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. The manufacture of stable diazo-salt preparations by adding to a solid naphthalenesulphonate of a diazo-compound a solid free arylsulphonic acid as a stabilising agent, either alone or mixed with a readily-soluble salt.

2. Stable diazo-salt preparations which can be made by the manufacture referred to in Claim 1, whenever so made or made by any process which is the obvious chemical equivalent of such manufacture.

Dated this 27th day of July, 1927.

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Agents for the Applicants.